DESCRIPTION OF A NEW SPECIES OF *PHYLLOTROX* INFESTING SEEDS OF *ACER GRANDIDENTATUM*, WITH NEW SYNONOMY AND A NOTE ON *EUCLYPTUS* (COLEOPTERA: CURCULIONIDAE: ERIRHININAE)

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Abstract.— A new species of weevil, *Phyllotrox canyonaceris* Warner, is described, new synonomy, and distribution records of eight species of the genus *Phyllotrox* in North America are given.

A name has been requested for a weevil infesting the seeds of bigtooth or canyon maple, *Acer grandidentatum* Nutt., a maple indigenous to the intermountain region. The life history of the weevil is currently being studied by others. I have determined that it is a new species, and I describe it below.

Phyllotrox canyonaceris, n. sp.
Fig. 1-5

Male.— Holotype, body oblongovate, length 2.40 mm, width 1.10 mm; integument light brownish yellow, rostrum, head, scutellum, elytral suture, and venter darker; clothed with golden hairlike setae. *Head.* Brownish red, densely, finely punctured; golden hairlike setae between eyes. Eyes large, convex. Rostrum a little shorter than pronotum, arcuate, densely punctured, punctures elongate, tending to become confluent longitudinally; sparse golden hairlike setae visible at high magnification. Antennae inserted at apical third of rostrum; scape slender, slightly arcuate, nearly attaining the eye; funicle densely pubescent, compact, 7-segmented, first segment stout, much wider and 3 times as long as second, 2-7 subequal in length, 7 a little wider than others; club oval, as long as funicular segments 2-7 combined; densely clothed with fine pubescence. *Thorax.* Dorsally slightly convex, wider than long (0.66-0.49 mm), sides evenly rounded, feebly constricted at apex; densely punctured, each puncture with golden, recumbent seta. *Legs.* Slender, sparsely clothed with fine golden hairlike setae; uniformly reddish yellow; tarsi slender, tarsal segment 3 deeply bilobed; claws simple, divergent, broadened at base (Fig. 4). *Elytra.* Oblong, length 1.66 mm, width at humeri 0.99 mm, wider than pronotum; sides feebly arcuate, tapering from basal third to apex; intervals of equal width except intervals 1 and 2 wider and more convex at apex; striae well defined, with small, deep, round, close-set punctures, each puncture with minute golden setae; clothed with fine semiappressed golden hairlike setae. *Venter.* Anterior coxae closer to posterior margin than to anterior margin of prosternum; pubescence of fine whitish hairlike setae, dense laterally on metasternum and on lateral angle of visible abdominal sterna 3 and 4; metasternum densely punctured laterally, abdominal sterna finely, sparsely punctured, visible sternum 5 more densely punctured; visible abdominal sterna 1 and 2 subequal in length, 3 and 4 equal, 5 as long as 3 and 4 combined; visible sternum 1 slightly concave; visible sternum 5 with apex deeply notched medially; pygidium medially with deep oblong fossa, extending almost to apex. Genitalia as figured (Figs. 1, 2).

Female.— Allotype. Length 2.49 mm, width 1.10 mm; like male except ventral punctures finer; visible sternum 5 convex, shorter, not notched but transversely deeply depressed just before raised apex; pygidium flat, coarsely punctured, each puncture with a whitish scale, and with stiff golden setae on margin; spermatheca and sternum 8 as figured (Figs. 3, 5).

Holotype, male, and allotype, female.—Utah, Cache Co., Logan Canyon, above Lewis M. Turner Campground, 8-VII-73, Philip A. Barker, Hopkins no. 58406; reared from samaras of *Acer grandidentatum* Nutt., USNM type no. 73809. Paratypes: 10 males and 12 females, same data as holotype. Male paratypes vary in length from 2.32 to 2.65 mm, fe-

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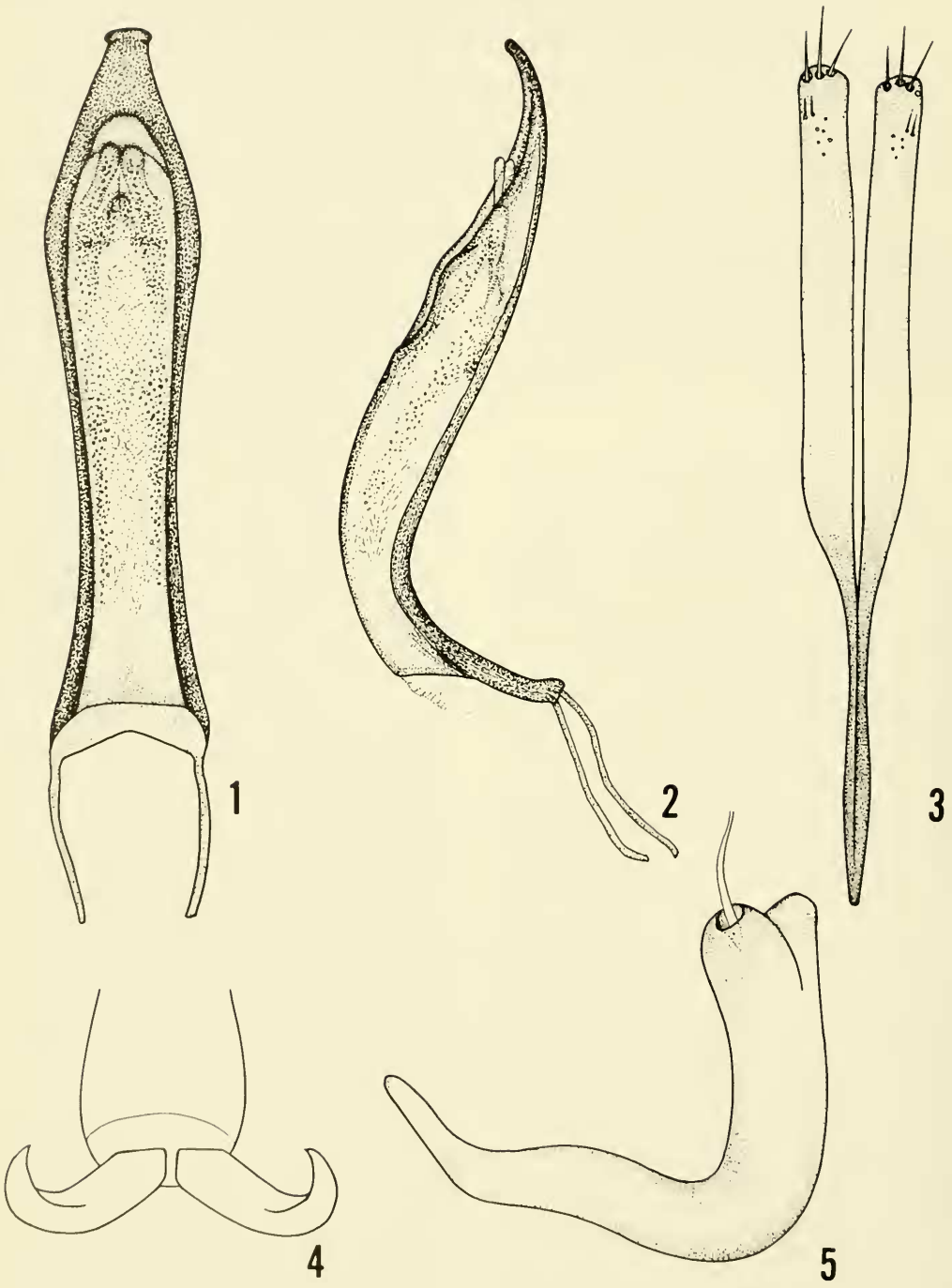

Figs. 1-5. *Phyllotrox canyonaceris* n. sp.; 1-2, median lobe of male genitalia, 1. dorsal, 2. lateral; 3. sternum 8 of female; 4. claw, posterior tarsus; 5. spermatheca. Drawn by Keiko Hiratsuka Moore.

male paratypes vary in length from 2.32 to 2.70 mm. This species varies little. The head and metasternum are sometimes dark brown to black. The pronotum frequently has a fine, longitudinal, slightly raised, impunctate median line.

I also studied 208 nonparatypic specimens, collected between April and October, from the following locations: UTAH. Cache Co.: Providence; Logan Canyon: electric power station, second dam, power plant, NE China Row, above hydroelectric plant, Dewitt Meadows, four miles up canyon; Wellsville Canyon: Green Canyon; Cub River Canyon; Willow Flat. Box Elder Co.: Box Elder Canyon; Mantua. IDAHO. Franklin Co.: Cub River Canyon; Willow Flat; Strawberry Canyon; Mink Creek Canyon.

The above specimens were found on the following plants (in order of frequency): rubber rabbitbrush, *Chrysothamnus nauseosus* (Pallas) Britt; gum wood, *Grindela squamose* (Pursh) Dunal; golden rod, *Solidago* sp.; sunflower, *Helianthus annuus* L.; and specimens reared from duff and soil samples taken directly beneath *Acer grandidentatum*.

Specimens are in the collection of the Utah State University, Logan, Utah.

This species is very similar in general appearance to *P. rutilus* (Fall). It differs in having a shorter, stouter rostrum, a compact antennal funicle, a deeper notch on visible sternum 5 in the male, and a transversely depressed visible sternum 5 in the female. In *rutilus* the rostrum and antennal funicle are more slender; the notch on visible sternum 5 in the male is broader and in the female visible sternum 5 at apex has on each side of the middle a short, oblique, rounded carina. *Phyllotrox canyonaceris* may also be confused with *P. nubifer* LeConte, but *nubifer* has a straight rostrum and usually has a black rostrum, head, and scutellar area and a darker venter.

The three species can easily be separated by the differences in the shape of the median lobe of the male genitalia and by the shape of the female spermatheca and sternum 8.

Etymology.— The name *canyonaceris* is one of the common names of canyon maple, the host. This maple is found so predominately in the canyons of the Wasatch Mountains that the name seems fitting.

Biology.— The species develops in the seeds of *Acer grandidentatum*, one larva in each seed. Adults visit the flowers in the spring and lay eggs directly on the rudimentary seed. In August larvae emerge from the seeds through a hole they make in the shell of the samaras. After boring out of the samaras, the larvae drop to the duff beneath the tree, where they complete their development to adulthood either in the fall or during the following spring. Larvae are most abundant in seeds in early summer (Barker 1974: 7).

Euclyptus Dietz, 1891 (type species *testaceus* Dietz), described in the subfamily Anthonominae, was synonymized by Champion (1902:141) with *Phyllotrox* Schoenherr, 1843:190 (type species *P. semirufus* Boheman [= *P. rufus* Schoenherr, in error]), a genus of the subfamily Erirhininae. Kissinger (1964:54), although questioning Dietz's action and apparently overlooking the synonymy of Champion, retained *Euclyptus* in Anthonominae (tribe Endaeini). I recognize as correct the synonymy proposed by Champion; therefore, *Euclyptus* is retained under *Phyllotrox* in Erirhininae.

The genus *Phyllotrox* in North America now contains the following species:

canyonaceris Warner, new species. Utah, Idaho.
derivatus (Fall), 1913:44. New Mexico, Arizona.
equisetus (Fall), 1913:44. New Mexico, Arizona.
ferrugineus LeConte, 1876:174 (= *testaceus* Dietz, 1891:272) New Synonymy. New York, New Jersey, Virginia, District of Columbia, Maryland, North Carolina, Georgia, Florida, and Iowa.
nubifer LeConte, 1876:174 (= *fulvipennis* Sleeper, 1955:54) New Synonymy. British Columbia, California, Colorado, Idaho, Iowa, Manitoba, Montana, Oregon, Ohio, Utah, Washington, and Wyoming.
quadricollis Fall, 1907:265. New Mexico.
rutilus (Fall), 1913:43. Arizona, British Columbia, California, Idaho, Oregon, South Dakota, Utah, and Washington.
sejunctus (Fall), 1913:43. Colorado, New Mexico.

The types of all except *fulvipennis* Sleeper have been examined, but I did study paratypes of *fulvipennis* in the U.S. National Museum.

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